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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,783	03/15/2001	Seiichi Nakamura	04329.2535	9959

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EXAMINER
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CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/812,783	Applicant(s) NAKAMURA ET AL.	
	Examiner Dave Czekaj	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection. Further, the examiner would like to note that although the amendment appears similar to the cancelled claims, the amendment is in fact different thus changing the scope of the claimed invention.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 7-9, 12-14, and 16-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (6751405).

Regarding claims 1, 12, and 17, Hasegawa discloses an apparatus that relates to a video recording apparatus in which compression of video is performed by a software process (Hasegawa: column 1, lines 6-10). This apparatus comprises "coding a frame of video data" (Hasegawa: figure 1, item 4, wherein the video compressing portion or encoder codes the video data, column 6, lines 31-32, wherein the frames are contained within the GOP) and "detecting a processing time required for the coding of the frame" (Hasegawa: figures 1-2, column 5, lines 15-17, wherein the processing time for coding the frame is measured by the timer). Although Hasegawa fails to show controlling the coding

of the next frame as disclosed, Hasegawa does show controlling the coding to maintain a predetermined frame rate (Hasegawa: figure 1, items 1 and 2, wherein the timer and frame drop control portion control the coding, column 7, lines 1-11, wherein the predetermined frame rate is 1 GOP (15 frames) per 0.5 seconds). Hasegawa further discloses dropping a number of frames within the GOP if the predetermined time period is exceeded (Hasegawa: column 6, lines 49-64). The examiner notes that dropping frames controls the encoding of the next frame since multiple frames within the GOP can be dropped. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the controlling of the coding of the next frame in order to obtain an apparatus that can operate within the time constraints of the encoder/compressor.

Regarding claims 3, 9, and 14, Hasegawa discloses "controlling a motion vector detection in the coding of the next frame based on the processing time" (Hasegawa: figure 1, item 3, wherein the motion vector detection is performed by the motion detecting portion, column 6, lines 10-14, wherein the controlling is controlling the motion detecting portion to perform the process of dropping frames, column 5, lines 15-17, wherein the processing time for coding the frame is measured by the timer).

Regarding claims 5 and 19, Hasegawa discloses "filtering the video data prior to the coding wherein the controlling comprises controlling the filtering based on the detected time so that the predetermined frame rate is maintained"

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(Hasegawa: figure 1, item 1, wherein the filter is the frame drop control portion which serves to drop, or filter, frames so that a frame rate is maintained, column 5, lines 15-17, wherein the processing time for coding the frame is measured by the timer).

Regarding claims 7 and 16, note the examiners rejection for claims 1 and 5.

4. Claims 4, 10, 21, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (6751405) in view of Komiya et al. (6192078), (hereinafter referred to as "Komiya").

Regarding claims 4, 10, 21, 24, and 26, note the examiners rejection for claim 1, and in addition, claims 4, 10, 21, 24, and 26 differ from claim 1 in that claims 4, 10, 21, 24, and 26 further require the controlling to comprise controlling a search range or search precision of a block search in the motion vector detection. Komiya teaches that controlling the search range of a block search improves motion vector detection precision (Komiya: column 3, lines 57-64, wherein the controlling is selecting the small area, the search range is the search area). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Hasegawa and add the search area control taught by Komiya in order to obtain an apparatus that more precisely calculates motion vectors.

5. Claims 6, 11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (6751405) in view of Kawahara (6393393).

Regarding claims 6, 11, and 15, note the examiners rejection for claim 1, and in addition, claims 6, 11, and 15 differ from claim 1 in that claims 6, 11, and 15 further require detecting a load of the CPU and controlling the coding based on the load. Kawahara teaches that knowing the load of the CPU allows for optimal grouping for encoding (Kawahara: figure 7b, column 11, lines 28-55). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Hasegawa and add the CPU load monitoring taught by Kawahara in order to obtain an apparatus that operates more efficiently by performing optimal grouping.

Regarding claims 20, 23, and 25, note the examiners rejections for claims 3 and 6.

Regarding claim 22, note the examiners rejections for claims 5 and 6.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US-6567117      05-2003      Nago et al.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (703) 305-3418. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600